

**REMARKS**

Claims 1-11 are all the claims pending in the application.

A reconfigurable multiplexer (r-mux) branching unit is defined at page 3 of the present application as a branching unit whose number of channels could be varied without altering the response of the remaining channels.

Claim 1 describes a reconfigurable multiplexer as including a manifold having a plurality of ports, with at least one of the ports being connected to a filter having at least first and second resonant cavities, and at least one other ports being connected to a filter head which has only a first resonant cavity like the first resonant cavity of the filter. The filter head can be connected to either a cover plate (to act as a short circuit) or to a filter tail (to form an additional filter).

Sawdey illustrates a manifold 38 having a plurality of ports. A filter 62 is coupled to one port. The element 62 is not a single-cavity filter head but instead a two-cavity bandpass filter, with an upper cavity 84 and lower cavity 86 separated from one another by a transverse wall 88.

In the Advisory Action mailed March 14, 2008, the examiner argues that Sawdey does disclose a multiplexer forming multiple channel routing, “i.e., re-configurable multiplexer.” The examiner is here using his own definition of a reconfigurable multiplexer, and ignores the definition that must be accorded that term due to the clear definition in the specification. There is nothing at all in Sawdey which describes a way of changing the number of channels without altering the response of the remaining channels.

To achieve reconfiguration, the present invention provides a filter head that can be selectively connected to either a filter tail (to form a two-cavity filter) or to a covering plate (to form a short circuit). The examiner further argues in the Advisory action that the “either” / “or”

language in claim 1 can be reasonably read broadly so as to only require satisfaction of one of the connections. This is not a “reasonable” interpretation of the claim.

First of all, if the examiner in fact believes the claim can be read that way, the proper rejection is a rejection for ambiguity under the second paragraph of 35 USC 112, since reciting things in the alternative is considered by the USPTO to result in indefiniteness.

The claim language is not indefinite when it recites two connections which the filter head is configured to be capable of. That is the only way the claim makes sense. It is the only way the phrase reads on the specification. It is the feature of the claim that leads to reconfigurability of the multiplexer.

For the above reasons, it is submitted that the claims as they existed prior to this amendment patentably distinguished over the prior art. Nonetheless, in order to preclude the interpretation the examiner bases his rejection on, the independent claims have now been amended to recite that the filter head is *selectively* connectable to either a covering plate or a filter tail. The first resonant cavity of filter 62 in Sawdey is not *selectively* connectable to the second resonant cavity.

Further examination is respectfully requested.

Respectfully submitted,

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